

REMARKS

The Examiner rejected claims 1-26 in the first Office Action. The Applicants respond to the rejections, and request reconsideration based on this Reply.

I. Claim Rejections Under 35 U.S.C. § 102(e) - Boothby

The Examiner rejected claims 1-16 and 18 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,141,664, issued to Boothby ("Boothby").

Boothby teaches a synchronization process as follows. The Parameter_Table 4 is generated by the Parameter Table Generator 3. The Synchronizer 15 then creates the Workspace 16 data array and loads the History File 19 into the Workspace 16. The B_Reader module 11 of the B_Translator reads the B_database records and sends them to the Synchronizer for writing into the Workspace. Following the loading of B_Database records, the A_Sanitizer module 8 of the A_Translator 5 sanitizes the B_Records in the Workspace. The A_Reader module 7 of the A_Translator 5 then reads the A_Database records and sends them to the Synchronizer 16 for writing into the Workspace. The B_Sanitizer module 12 of the B_Translator 9 then sanitizes the A_Records in the Workspace. The Synchronizer then performs the Conflict Analysis and Resolution (CAAR) on the records in Workspace. At the end of this analysis the user is asked whether he/she would like to proceed with updating the A_and B_databases. If so, the B_Unloader module of the B_Translator unloads the appropriate records into the B_database. The A_Unloader module 6 then performs the same task for the A_Database. Finally, the Synchronizer creates a new History File 19. See col. 4, ln. 49 - col. 5, ln. 4.

FIG. 3 is the pseudocode for the preferred embodiment of the Control Module 2 of the Translation Engine 1. Control Module 2 first instructs the Parameter Table Generator 3 of the

Translation Engine 1 to create the Parameter_Table (Step 100). FIG. 4 is the pseudocode for the preferred embodiment of the Parameter Table Generator module 3. The user is first asked to choose whether to use a previously chosen and stored set of preferences or to enter a new set of preferences (Step 150). Steps 151-165 show the steps in which the user inputs his/her new preferences. In step 152, the user chooses whether to perform a synchronization from scratch or an incremental synchronization. In a synchronization from scratch, synchronization is performed as if this was the first time the two databases were being synchronized. In an incremental synchronization, the History File from the previous file is used to assist with synchronization. The user will likely choose incremental synchronization if there has been a prior synchronization, but the user may choose to synchronize from scratch where the user would like to start with a clean slate (perhaps due to significant change in the nature of the data in the databases). The user then selects the two Applications and related databases (A_Database and B_Database) to be synchronized (step 153). The user then chooses (step 154) whether the Synchronizer should use the default field mapping for those two databases during synchronization or the user will modify the field mapping. In accordance with the user's preferences, the Parameter Table Generator then stores the appropriate A_Database to B_Database fields map (A.fwdarw.B_Map) and B_Database to A_Database fields map (B.fwdarw.A_Map) in the Parameter_Table (Steps 155-158 and 159-163, accordingly). See col. 5, ll. 5-38.

A. Claims 1 and 18

The Examiner rejected claims 1 and 18 based on the above-cited passage from Boothby. The Applicants respectfully disagree. First, the above-cited passage does not disclose, teach or suggest "associating a pair of synchronization parameters with each data record stored in the first

and second databases, the pair including a first synchronization parameter associated with the first database, and a second synchronization parameter associated with the second database" as claimed in claims 1 and 18. In fact, *there is no teaching of "associating a pair of synchronization parameters with each data record stored in the first and second databases" anywhere in Boothby.* Boothby simply does not teach or suggest that a pair of synchronization parameters, one associated with one database or system which stores data records and the other associated with the other database or system that stores data records, is associated with each data record in both databases or systems. Additionally, Boothby does not disclose, teach or suggest "incrementing the first synchronization parameter associated with the updated data record at the first database."

Second, Boothby does not disclose, teach or suggest "transmitting a first update message from the first database to the second database, *the first update message including the incremented first synchronization parameter, the second synchronization parameter, and the updated data record from the first database*" and "receiving the first update message at the second database". In Boothby, the synchronization is managed from a central component - the synchronizer 15. Updated information is sent from the synchronizer 15 to each database, and not from one database to another as claimed in claims 1 and 18.

"A claim is anticipated only if *each and every element as set forth in the claim is found*, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628 (Fed. Cir. 1987); MPEP § 2131. Boothby does not disclose *each and every element as set forth in claim 1 and 18*. For at least these reasons, the Applicants respectfully submit that Boothby does not anticipate claims 1 and 18, and respectfully request that the Examiner withdraw the rejection of claims 1 and 18.

B. Claims 2 - 5

Because claims 2 - 5 depend from claim 1 either directly or indirectly, the Applicants respectfully submit that Boothby does not anticipate claims 2-5 for the same reasons with respect to claim 1, and respectfully request that the Examiner withdraw the rejection of claims 2-5.

C. Claim 6

With respect to claims 6, Boothby does not disclose, teach or suggest "comparing the second synchronization parameter stored at the second database with the second synchronization parameter transmitted to the second database in the first update message." For these reasons, and for the reasons argued with respect to claim 1 above, the Applicants respectfully submit that Boothby does not anticipate claim 6, and respectfully request that the Examiner withdraw the rejection of claim 6.

D. Claim 7

With respect to claim 7, and based on the arguments with respect to claim 6, Boothby does not disclose, teach or suggest "incrementing the second synchronization parameter associated with the updated data record at the second database" and "transmitting a second update message from the second database to the first database, the second update message including the incremented second synchronization parameter, the first synchronization parameter, and the updated data record from the second database." Accordingly, the Applicants respectfully submit that Boothby does not anticipate claim 7, and respectfully request that the Examiner withdraw the rejection of claim 7.

E. Claims 8-10

Because claims 8-10 depend from claim 1 either directly or indirectly, the Applicants respectfully submit that Boothby does not anticipate claims 8-10 for the same reasons with respect to claim 1, and respectfully request that the Examiner withdraw the rejection of claims 8-10.

F. Claim 11

The Examiner rejected claim 11 based on the above-cited passage from Boothby. First, for the same reasons as given with respect to claim 1, the above-cited passage does not disclose, teach or suggest "associating a first device synchronization parameter and a first host synchronization parameter with each data record stored at the host system" and "associating a second device synchronization parameter and a second host synchronization parameter with each data record stored at the portable data communication device" as claimed in amended claim 11.

Second, Boothby does not disclose, teach or suggest the steps of "if a data record is updated at the host system, then updating the first host synchronization parameter, and transmitting a first update message from the host system to the portable data communication device" and "if a data record is updated at the device, then updating the second device synchronization parameter, and transmitting a second update message from the portable data communication device to the host system" as claimed in amended claim 11. No such teaching of incrementing such synchronization parameters and transmitting the synchronization parameters as claimed can be found in Boothby.

For at least these reasons, the Applicants respectfully submit that Boothby does not anticipate amended claim 11, and respectfully request that the rejection of claim 11 is overcome.

G. Claims 12 and 13

With respect to claims 12 and 13, Boothby does not disclose, teach or suggest update messages including updated host and device synchronization parameters as claimed in claims 12 and 13. As previously argued above, Boothby does not disclose any such update messages. For at least these reasons, and for the reasons argued with respect to claim 11, the Applicants respectfully submit that Boothby does not anticipate claims 12 and 13, and respectfully submit that the rejection of claims 12 and 13 is overcome.

H. Claim 14 - 16

Because claims 14 -16 depend from claim 11, the Applicants respectfully submit that Boothby does not anticipate claims 14 -16 for the same reasons with respect to claim 11, and respectfully submit that the rejection of claims 14 - 16 is overcome.

II. Claim Rejections Under 35 U.S.C. § 102(e) - Tran

The Examiner rejected claims 19-26 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,202,060, issued to Tran ("Tran").

Tran discloses a computer system connected to one or more input/output (I/O) ports 42 which allows the CPU 20 to communicate with other computers. Each of the I/O ports 42 may be a parallel port, a serial port, or alternatively a proprietary port to enable the computer system to dock with the host computer. In the event that the I/O port 42 is housed in a docking port 84

(FIG. 5), after docking, the I/O ports 42 and software located on a host computer 82 (FIG. 5) support an automatic synchronization of data between the computer system and the host computer. During operation, the synchronization software runs in the background mode on the host computer 82 and listens for a synchronization request or command from the computer system 10 of the present invention. Changes made on the computer system and the host computer will be reflected on both systems after synchronization. Preferably, the synchronization software only synchronizes the portions of the files that have been modified to reduce the updating times. See col. 12, ll. 8-24.

A. Claim 19

The Examiner rejected claim 19 based on the above-cited passage from Tran. The Applicants respectfully disagree. Tran only discloses a general teaching that data may be synchronized. Tran does not teach "a portable data communication device coupled to a device database, wherein the device database stores data records that have been modified to include a second host synchronization parameter and a second device synchronization parameter in each data record," "software operating at the host system for updating a data record and for generating a first update message that is transmitted from the host system to the portable data communication device when a data record is updated at the host system, the first update message including the first host synchronization parameter, the first device synchronization parameter, and the updated data record stored at the host system," and "software operating at the portable data communication device for updating a data record and for generating a second update message that is transmitted from the portable data communication device to the host system when a data record is updated at the portable data communication device, the second update

message including the second host synchronization parameter, the second device synchronization parameter, and the updated data record stored at the portable data communication device" as claimed in amended claim 19.

"A claim is anticipated only if *each and every element as set forth in the claim is found*, either expressly or inherently described, in a single prior art reference." Verdegaal Bros., 814 F.2d 628; MPEP § 2131. Tran's general statement about synchronizing data *clearly does not disclose each and every element as set forth in the claim*. For at least these reasons, the Applicants respectfully submit that Tran does not anticipate claim 19, and respectfully request that the Examiner withdraw the rejection of claim 19.

B. Claims 20 - 24

Because claims 20-24 depend from claim 19, the Applicants respectfully submit that Tran does not anticipate claims 20-24 for the same reasons with respect to claim 19, and respectfully request that the Examiner withdraw the rejection of claims 20-24.

C. Claim 25

The Examiner rejected claim 19 based on the above-cited passage from Tran. Again, the Applicants respectfully disagree. Tran only discloses a general teaching that data may be synchronized. Tran does not teach "associating a pair of synchronization parameters with each data record stored in the host systems, the pair including a first synchronization parameter associated with one of the host systems, and a second synchronization parameter associated with the portable data communication device" and "associating two pairs of synchronization parameters with each data record stored in the portable data communication device, each pair

including a first synchronization parameter associated with one of the host systems, and a second synchronization parameter associated with the portable data communication device."

Furthermore, Tran does not teach "incrementing the first synchronization parameter associated with the updated data record at the one host system" and "transmitting a first update message from the one host system to the portable data communication device, the first update message including the incremented first synchronization parameter, the second synchronization parameter, and the updated data record from the one host system." Again, Tran's general statement about synchronizing data *clearly does not disclose each and every element as set forth in the claim*. For at least these reasons, the Applicants respectfully submit that Tran does not anticipate claim 25, and respectfully request that the Examiner withdraw the rejection of claim 25.

D. Claim 26

Because claim 26 depends from claim 26, the Applicants respectfully submit that Tran does not anticipate claim 26 for the same reasons with respect to claim 25. Furthermore, Tran does not disclose the recited limitations of claim 26. Accordingly, the Applicants respectfully request that the Examiner withdraw the rejection of claim 25.

III. Claim Rejections Under 35 U.S.C. § 103(a)

The Examiner rejected claim 17 under Boothby in view of Tran. The Applicants respectfully disagree. To establish a prima facie case of obviousness, the references, when combined, must teach or suggest the claimed limitations. MPEP 2143. Neither Boothby or Tran, either alone or in combination, teach a "first update message including a first host

synchronization parameter, a first device synchronization parameter associated with the updated data record stored at the host system" and a "second update message including a second host synchronization parameter, a second device synchronization parameter associated with the updated data record stored at the portable communication device" as claimed in amended claim 17. For at least these reasons, Boothby and Tran, when combined, do not disclose all of the claimed limitations of amended claim 17. Accordingly, the Applicants respectfully request that the rejection of claim 17 be withdrawn.

IV. New Claims 27 - 31

The Applicants respectfully submit that new claim 27 is allowable over the cited art because the cited art, either alone or in combination, does not disclose, teach or suggest "associating a pair of synchronization parameters with each data record stored in the host systems, the pair including a first synchronization parameter associated with one of the host systems, and a second synchronization parameter associated with the portable data communication device" and "associating two pairs of synchronization parameters with each data record stored in the portable data communication device, each pair including a first synchronization parameter associated with one of the host systems, and a second synchronization parameter associated with the portable data communication device." For at least these reasons, the Applicants submit that claim 27, and dependent claims 28-31, are presently in condition for allowance.

V. Conclusion

For the reasons stated above, Applicant respectfully submits that the pending claims are in condition for allowance and requests that a Notice of Allowance be issued.

The Commissioner is hereby authorized to charge any fees associated with this response to Jones Day Reavis & Pogue's Deposit Account No. 501432, ref: 555255-012123.

Respectfully submitted,
JONES, DAY, REAVIS & POGUE

A handwritten signature in black ink, appearing to read 'Paul E. Franz', is written over a horizontal line.

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Appendix A

Please amend the claims as follows:

11. (Amended) A method of synchronizing data records stored in a host system and a portable data communication device, comprising the steps of:

associating a first device synchronization parameter and a first host synchronization parameter with [the] each data record[s] stored at the host system;

associating a second device synchronization parameter and a second host synchronization parameter with [the] each data record[s] stored at the portable data communication device;

if a data record is updated at the host system, then updating the first host synchronization parameter, and transmitting a first update message from the host system to the portable data communication device; and

if a data record is updated at the device, then updating the second device synchronization parameter, and transmitting a second update message from the portable data communication device to the host system.

13. (Amended) The method of claim 11, wherein the second update message includes the updated second device synchronization parameter, the second host synchronization parameter, and the updated data record stored at the portable data communication device.

14. (Amended) The method of claim 11, further comprising the steps of:

receiving the first update message at the portable data communication device; and

if there is no conflict detected at the portable data communication device, then updating the data record at the portable data communication device using the information from the first update message.

15. (Amended) The method of claim 11, further comprising the steps of:

receiving the second update message at the host system; and

if there is no conflict detected at the host system, then updating the data record at the host system using the information from the second update message.

16. (Amended) The method of claim 11, further comprising the step of providing a wireless network for transmitting the update message between the host system and the portable data communication device.

17. (Amended) A method of resolving conflicts in a data record synchronization system that synchronizes data records between a host system and a portable data communication device, comprising the steps of:

designating the host system as the master and the portable data communication device as the slave;

simultaneously updating a particular data record at both the host system and the portable data communication device;

transmitting a first update message from the host system to the portable data communication device, the first update message including a first host synchronization parameter,

a first device synchronization parameter associated with the updated data record stored at the host system, and the updated data record stored at the host system;

transmitting a second update message from the portable data communication device to the host system, the second update message including a second host synchronization parameter, a second device synchronization parameter associated with the updated data record stored at the portable communication device, and the updated data record stored at the portable data communication device;

receiving the second update message at the host system, detecting a conflict has occurred for the particular data record, and ignoring the second update message; and

receiving the first update message at the [host system] portable data communication device, detecting a conflict has occurred for the particular data record, and updating the data record at the portable data communication device using the information from the first update message.

19. (Amended) A data record synchronization system, comprising:

a host system coupled to a host database, wherein the host database stores data records that have been modified to include a first host synchronization parameter and a first device synchronization parameter in each data record;

a portable data communication device coupled to a device database, wherein the device database stores data records that have been modified to include a second host synchronization parameter and a second device synchronization parameter in each data record;

a network coupling the host system to the portable data communication device;

software operating at the host system for updating a data record and for generating a first update message that is transmitted from the host system to the portable data communication device when a data record is updated at the host system, the first update message including the first host synchronization parameter, the first device synchronization parameter, and the updated data record stored at the host system; and

software operating at the portable data communication device for updating a data record and for generating a second update message that is transmitted from the portable data communication device to the host system when a data record is updated at the portable data communication device, the second update message including the second host synchronization parameter, the second device synchronization parameter, and the updated data record stored at the portable data communication device.